



# MAGAZINE

PRICE TWOPENCE

AUGUST 1956





The *I.C.I. Magazine* is published for the interest of all who work in I.C.I., and its contents are contributed largely by people in I.C.I. It is edited by Sir Richard Keane Bt., and printed at The Kynoch Press, Birmingham, and is published every month by Imperial Chemical Industries Limited, Imperial Chemical House, Millbank, London, S.W.1, Phone: VICTORIA 4444. The editor is glad to consider articles for publication, and payment will be made for those accepted.

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FRONT COVER: *Lake Talyllyn in Wales. Photograph by J. Boyd.*

OUR CONTRIBUTORS

D. G. DAVEY has been in the Research Department (Biological Group) of the Pharmaceuticals Division since 1941. He helped discover 'Paludrine,' which is still the most widely used drug for protection against malaria, and also 'Antrycide,' about which he writes on this page. Problems, real and imagined, concerned with the use of these drugs have taken him to most parts of the tropical world.

D. R. ROBINSON works in the Overseas Sales Department at Dyestuffs Division. He is an enthusiastic member of the Talyllyn Railway Preservation Society.

SIDNEY ROGERSON, now working as an independent public relations consultant, was I.C.I.'s Publicity Controller from 1942 to 1952, when he was lent by the Company to the War Office for special publicity work.

ANN WHITE is married to the medical officer of the Magadi Soda Co. She has lived in East Africa since 1940.

Fight Against The Tsetse Fly

By D. G. Davey (Pharmaceuticals Division)

Through countless centuries African cattle have been ravaged by trypanosomiasis—a form of sleeping sickness carried by the tsetse fly. In the struggle to overcome this menace there is only one drug which is both prophylactic and curative—I.C.I.'s 'Antrycide.' Here Dr. D. G. Davey, who has worked on the drug from the beginning, tells of its progress in Africa.

FORGETTING politics in Africa—a difficult achievement when there—the two most important problems are water supply and tsetse fly disease in domestic animals. The total annual rainfall over much of the continent measured in inches per year appears more than adequate—it is often more than Manchester's! What is wrong is that too much comes down too quickly, and then for long, long periods there is no rain at all. Still, given the resources, this problem will be solved. Dams and reservoirs can be made, and boreholes can be sunk.

The solution of the tsetse problem is more difficult and the problem itself is much more complex. Basically it is easy to understand. The game animals of Africa, the country's greatest pride, carry organisms called trypanosomes in their blood. Through countless centuries a balance has been achieved between the trypanosomes and their hosts, and the game, although infected, are apparently healthy. The trypanosomes are spread from animal to animal by the tsetse fly, which feeds on blood. When it sucks the blood of an infected animal it also becomes infected and may remain infected for the rest of its life. Thereafter, whatever animal it feeds on, it will pour trypanosomes into the wound it makes with its proboscis. Tsetse fly will feed on cattle, horses, pigs, sheep and dogs as readily as they feed on game, and there are trypanosomes which will kill all these animals. They are new hosts for the parasite, and there has been no time for adaptation to the parasite to develop in game.

Taking an armchair view, the solution to the problem is easy to see. All the game could be killed, so destroying the reservoir of the disease and the food of many of the tsetse. Or the tsetse could be killed with insecticides such as 'Gammexane' and D.D.T., to which they are very susceptible, or the environment in which they live could be made unsuitable for them. Some of them live in riverine forest, but most live in the so-called bush, countryside covered with a rough thick growth of tangled bushes from which rise trees such as acacia. All of them must have shade from the sun, and if the shade is destroyed they die. So if the bush is cleared the tsetse will disappear. Finally, the domestic animals could be protected from the disease with drugs, or those infected could be cured.

All these solutions are possible theoretically. What defeats the would-be solver is the enormity of the problem. Someone has estimated that an area of 3½ million square miles, an area greater than the U.S.A., is cursed with tsetse. How many millions of game would have to be killed, how many thousands of aircraft would be wanted for spraying operations which have to be virtually simultaneous over thousands of square miles because of the continuity of the bush, or how many bulldozers and how much labour would be wanted to clear the land has never been computed.

We in Imperial Chemical (Pharmaceuticals) Ltd. thought that a drug might help, and as everyone knows in 1948 we found 'Antrycide.' We searched for a drug with both curative and prophylactic properties, the first so that animals already infected could be treated,

the second so that animals could be prevented from acquiring infection even though bitten by tsetse. 'Antrycide' has both kinds of properties.

There was already one drug in existence having curative properties. This was dimidium bromide, discovered in collaborative work between Dr. T. Walls, then of the National Chemical Laboratory, and Professor C. Browning of Glasgow University, and it has been of considerable service in Africa. It has, however, a serious disadvantage. Sometimes, for reasons that are still not properly understood, cattle treated with it exhibit a delayed toxic effect which appears about six weeks after the treatment has been made, and which frequently kills them. More recently a closely related drug called ethidium bromide, more active than dimidium, was discovered and is now being used in various parts of Africa.

The only Prophylactic

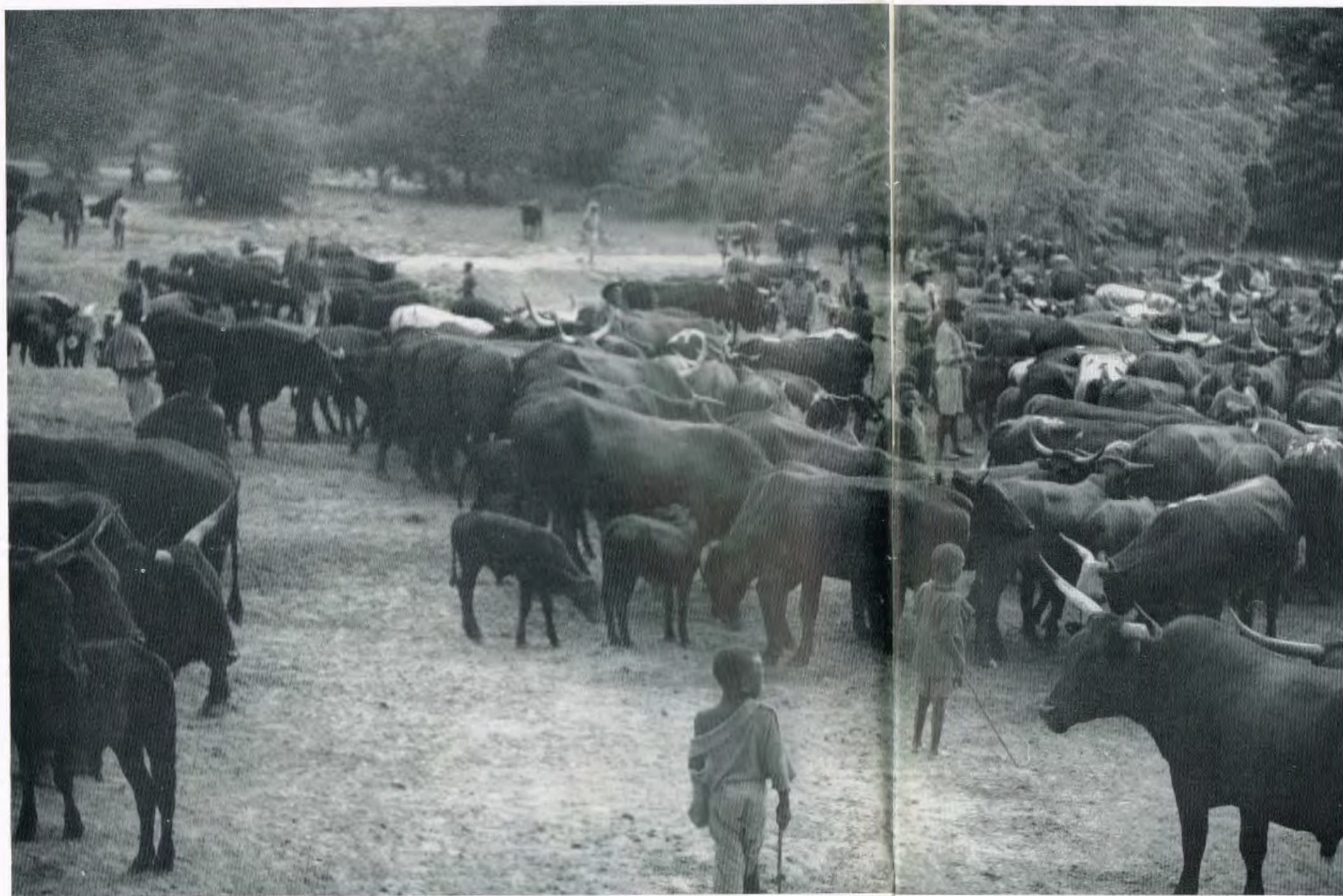
But 'Antrycide' is still the only drug in use with prophylactic properties, and the horizons in Africa will be widened only by drugs with these properties. Curative drugs help to preserve the *status quo*, as it were, although even that cannot be guaranteed; but they do not help in attack, and the future of Africa depends on wresting more country from the dominance of the tsetse. This is not to decry the curative qualities of any of the drugs.

In Uganda, for example, 'Antrycide' has done wonderful service by virtue of its curative properties alone, and some hundreds of thousands of cattle which might have died are now flourishing. These cattle had trypanosomes although they were not living in tsetse country. They had acquired it by what is called mechanical transmission. Some among them must have become infected in the first instance by stray tsetse flies—flies carried out of their normal haunts on cars, perhaps; moving objects attract them, and they seem to like riding on trains and cars.

Menace of Ordinary Flies

Thereafter the disease was spread by ordinary biting flies which, feeding on an infected animal and disturbed by the whisk of a tail, would settle on a nearby animal, insert the proboscis wet with infected blood, and so transmit the disease mechanically as man could do with a needle and syringe. The infection in the ordinary biting flies is of a transient nature, not semi-permanent as in the tsetse fly, and so there is no reservoir of the disease and it can be cleared by curative





*Cattle in Uganda awaiting their turn for injection with 'Antrycide'*

treatment of the cattle. This is what has been done in Uganda and in many other parts of Africa. But we hoped 'Antrycide' could be used to do even more. What sort of things is illustrated by what I saw during a very recent visit to Africa.

In Southern Rhodesia there is evidence that the tsetse fly is extending the boundaries of its kingdom.

Along the eastern border, where Southern Rhodesia runs into Portuguese East Africa, trypanosomiasis is increasing among the native cattle. Must the cattle, and with them their owners, retreat, and in the years to come will the retreat continue and the cattle country of Southern Rhodesia shrink and shrink again? The decision has been made to stay and protect the cattle

with 'Antrycide.' They will be given the drug every two or three months, and they will be kept free of trypanosomiasis. In the meantime a direct attack on the tsetse will also be attempted.

That is a simple statement of fact. Behind it is a camp in the bush where veterinary officers and their assistants get up before dawn and drive for an hour or

an hour and a half along tracks that shake their vehicles and themselves to bits and that in the rains are eighteen inches deep in mud. For the next seven hours they will wrestle with cattle, excited Africans, flies and heat, and then drive wearily back to camp, taking comfort in the thought that there are one thousand fewer cattle to be inoculated tomorrow.

### *Spread of Tsetse Fly*

In Uganda, in Ankole, tsetse has been spreading northwards from Tanganyika so that now it has extended its domain in a tongue of land stretching beyond Mbarara. The depleted herds of cattle and their sad owners retreated from the tongue in 1952. The tsetse appeared to be following. Should the retreat go on, and where would it end? Nine months ago the decision was made to go back to the land vacated in 1952 and protect the cattle with 'Antrycide.' I saw the cattle, 7500 of them (and more are to be taken back) a few weeks ago. With two of the veterinary officers of Uganda I rode in a Land Rover along a bush road. We traversed a wide arc stretching sixty miles or more, and at scattered intervals the Africans had brought their cattle to a convenient point for inspection. The Gombola chiefs were there, and the cattle owners and the herdsmen, and at each inspection point a little speech of thanks was made, sometimes by a Gombola chief, sometimes by a cattle owner, sometimes in English, sometimes in the local language. Each speech was a simple, sincere expression of thanks for this medicine that allowed them to reinhabit their lands.

### *The Voice of Gratitude*

Time slipped by. We had come to inspect cattle, and the Africans were making it an occasion to voice their gratitude. At 1 o'clock we should have finished our tour, but there were still others to be seen. To the last of the Africans, who must have been waiting several hours, I apologised that we had been so long along the way. He drew himself up. "Sah," he said, "I would have gladly waited a month to say thank you for what you are doing to help us!"

I came away thinking that whatever may be said in the streets of Kampala and Nairobi, and Lusaka and Salisbury, in a future galloping towards us, the heart of Africa will hold gratitude for all that we may do to help win the battle for the kingdom of the tsetse fly.



# The Estimator

I WALKED past benches at which tradesmen planed, chiselled, sawed and nailed many sorts of wood for many purposes. Teak, deal, red pine, yellow pine and some mahogany scented the air with the characteristic odours easily identified by the experts, but mostly the smell was the mild resinous tang of red pine, a wood that is much employed in Ardeer. Then I came to the office in the corner where Mr. Joe McManus works.

When I entered Joe's office he had a slide rule in his hand, and a drawer in a card index file was open. He put the slide rule down. "One of the tools of the trade," he remarked; "and my workbench is a desk nowadays." This is so because Joe McManus is one of Ardeer's Work Study estimators, a skilled joiner, with intimate knowledge of the craft, who was trained for a key role when it was decided, five years ago, to apply Work Study.

He is a highly skilled craftsman who has been trained in all the Work Study techniques, but particularly in analytical estimation. This training and over twenty years' experience of the trade in Ardeer, a factory that uses more woodwork for buildings and machinery than most, together with an intelligent appreciation of the other man's difficulties, make him acceptable and—most important of all—trusted.

"You've got to be fair," he told me. "When you make an estimate you have to visualise every single part of the job and assess a proper time for doing it." When a new job is to be tackled the estimator discusses the best way of doing it with the foreman or chargehand joiner. Then, after examining the work thoroughly, he breaks the whole job down into parts. These parts are well-defined complete jobs in themselves, which the estimator terms elements.

If a new task can be broken into elements which occur in other jobs, the estimator's work is easy. Data exist for these elements, because all have previously been measured. The estimator takes these, adds them together, and then, taking account of all the circumstances in which the new task is to be done, he adds what is called compensating rest allowance. This is to allow the man doing the job time to rest from his exertions. For this part of the estimate he uses as a guide a table of allowances for typical conditions. The completed estimate is written on a card—the "brief" for the tradesman.

On the card the job is specified and the time for the performance of the task, including the compensating rest allowance, is given. If the job is completed in smaller time than the given value, the craftsman qualifies for incentive bonus in proportion to the time saved.

To earn bonus, explained Mr. McManus, it is not necessary to work harder at any given working time. When a man operates with plane, hammer or chisel he works naturally at a bonus-earning rate. The saving over the day is secured by curtailing the number or duration of unnecessary interruptions.

When a task is estimated, the "briefing" also saves craftsmen's time, because the materials needed have already been decided.

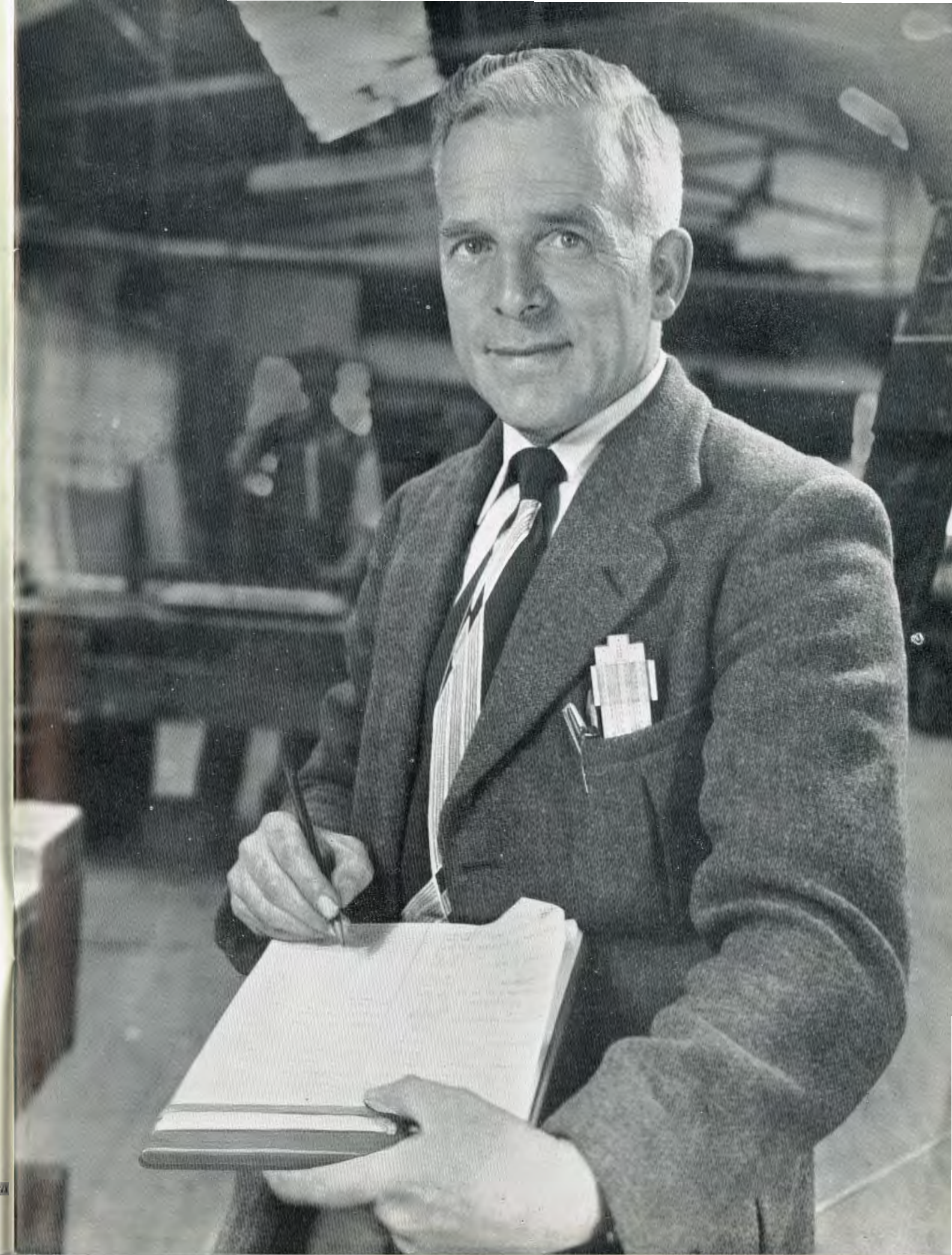
For a great number of repetitive tasks in a large factory measurements have already been made, and no estimating is needed. The construction of a window frame, for example, need not always be estimated. Many window frames are made, the work has been studied, and a value exists. If, however, a window frame of standard pattern has to be made from an unusual type of wood, this factor is allowed for, the estimator using his practical experience and training to apply the necessary modification in values.

With maintenance work the estimator's task is rarely as simple. Here the background of practical knowledge is invaluable. The trained man can see the "known elements" in the new tasks, and from his experience and training he can estimate fair values for the parts of the work which have not hitherto been encountered sufficiently often for them to have been studied. Situation and accessibility of work and nature of materials must all be thought about.

"What makes the job exciting," explained Mr. McManus, "is learning from experience. I'm always finding something new."

Besides estimating for jobs which need one man for their execution, there are more complex operations which involve teams of joiners. One such job will be started later this year, when the extensive woodwork needed for the new buildings at Ardeer's No. 2 Nitroglycerine Hill is erected. Many Ardeer joiners will be engaged. Mr. McManus and his colleagues are estimating this work now.

H.H.



Joe McManus



# Information Notes

## MORE ABOUT W. H. PERKIN

By W. H. Cliffe (Dyestuffs Division)

*"In the case of a man of Perkin's stature, even quite trivial unpublished details can be of absorbing interest" writes Mr. W. H. Cliffe. Here are extracts from letters published for the first time, throwing fresh light on the early days of the founder of the British dyestuffs industry.*

*Photographs from originals in the possession of Mr. W. R. Kirkpatrick*

WHAT a wealth of information could be gleaned if only Perkin had shared that amiable weakness of so many—inability to discard private papers. We may at

least be thankful that he retained some few to the end of his life. His grandsons, Mr. P. C. Kirkpatrick and Mr. W. R. Kirkpatrick, appear to have most of what are left, and they have most kindly placed them for the time being in the care of the Dyestuffs Division. In the case of a man of Perkin's stature, even quite trivial unpublished details can be of absorbing interest.

In 1906, when aboard the Cunard liner *Umbria* on his way to the Jubilee Celebrations in America, Perkin penned on the liner's writing paper a hurried and belated account of his early laboratory work.

The first public laboratory I worked in was the R.C.C. in Oxford Street, London, in 1853-56. This was very different to our present one, the appliances being few. We had to make our  $H_2S$  in a small square chamber connected with the chimney flue. There were no stink closets except the covered part of a large sand bath heated with coke. There were no Bunsen burners but we had short lengths of iron tube covered with wire gauze. For combustions we used charcoal. A bench and cupboard containing reagents and use of the above chamber was all we practically had and a charcoal combustion furnace in addition for advanced students. There was also a balance room downstairs.

My own first private laboratory was half of a small but long-shaped room with a few shelves for bottles and a table. In the fireplace a furnace was also built. No water laid on or gas. I used to work with old Berzelius spirit lamps and in a shed I did combustions with charcoal. It was in this laboratory I worked in the evening and vacation times and here I discovered and worked out my experiments on the mauve. The little back garden was afterwards used to conduct larger operations.

The scale on which Perkin made his mauve dye in the back garden referred to must have been considerable. At



*Professor A. W. Hofmann and his students at the Royal College of Chemistry, Oxford Street, London, about 1854. W. H. Perkin is fifth from the right in the back row.*

any rate his former master at the Royal College of Chemistry, Professor Hofmann, wrote to him on 23rd October 1856—shortly after Perkin left the College and many months before the works were built—saying: "Since you make aniline now on rather a large scale would you be so good as to let me have a quart or two of it."

The chief factor in setting Perkin on the road to manufacture was undoubtedly the encouragement he received from Pullars of Perth. Small wonder that Perkin so carefully preserved Robert Pullar's first letter, written on 12th June 1856. Outside the Perkin family it was not known until recently that this letter still survived. The opening paragraphs have often been quoted, but the letter covers five pages and gives interesting details of the dyeing procedure of the day. Even to handle this letter is to feel oneself taken back 100 years to that fateful day when an excited and half-fearful youth awaited the postman's arrival.

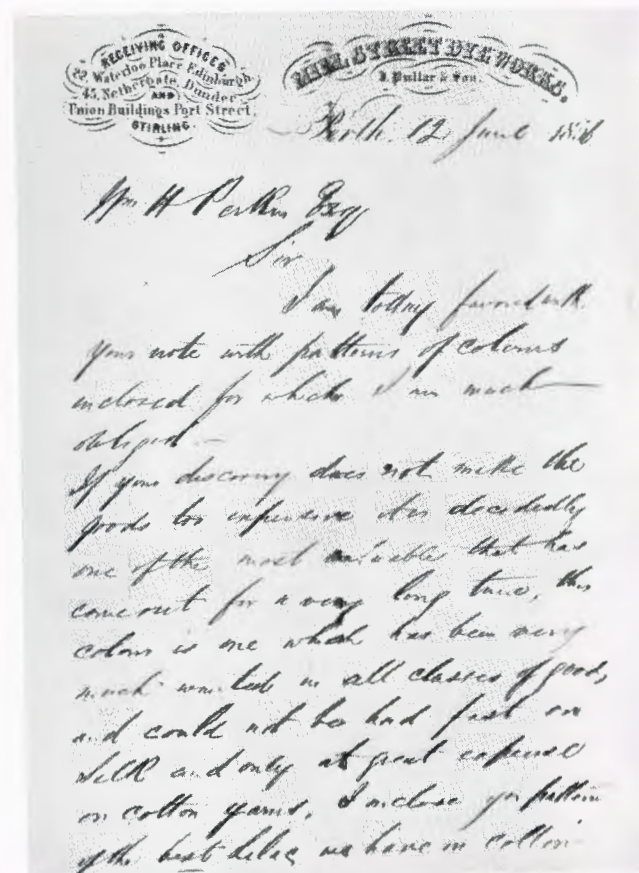
The only other letter from Robert Pullar known to exist (from the same collection) is dated seven months later, by which time Perkin had visited the Perth Dye-works to carry out dyeing trials. On 14th January 1857 Robert Pullar wrote "... the shades are certainly the best I ever saw. I suppose you are now fully decided to go on with it, from what I have seen there appears to be no doubt of its success," but there is no evidence that Pullars ever made commercial use of mauve.

Robert was not the only member of the Pullar family

to write to Perkin. He had a brother John who operated a separate dyeing and bleaching works at Bridge of Allan. The family and business relationships of Robert and John have been elucidated by Mr. L. E. Morris. A letter from John Pullar written on 14th May 1857 opens light-heartedly yet sympathetically:

"I duly recd. your note of 23rd ultimo and I observe that you have not yet begun to set the Thames on fire. I am really sorry however to hear that you have as yet been baffled in all your attempts to secure a piece of ground for carrying your scientific ideas into practice on a large scale. I sincerely hope you may ere long meet with a suitable place, and on reasonable terms—but I fear you will have to seek for it as you indicate near Manchester or Glasgow, or some such place where a Chemical Works is not such a bug-bear as it appears to be to the benighted inhabitants in the vicinity of the Metropolis. I am glad to hear that a rage for your colour has set in among that all-powerful class of the Community—the ladies. If they once take a mania for it and you can supply the demand, your fame and fortune are secure."

From this it is clear that before the works were built Perkin was engaged in small-scale commercial production of mauve, and it was almost certainly bought and used by Thomas Keith, the silk dyer of Bethnal Green. From the concluding paragraph of John Pullar's letter it seems that Perkin had undertaken some kind of investigation on Pullar's behalf to do with bleaching problems, with what outcome we shall probably never know.



*The letter which set Perkin on the road to fame and fortune. This is the first page of the first letter he received from Robert Pullar.*



## BEDTIME VERSE

*It is not often that we publish verse in the Magazine, but then it is a rare thing for a company's annual report to provide the inspiration. The following lines dedicated to Mr. R. A. Lynex (I.C.I. Secretary) were written by Mr. G. E. Walker, who is secretary of Associated Electrical Industries Ltd. (of which Lord Chandos, a director of I.C.I., is chairman).*

To R.A.L.

WE Secret'ries receive all sorts  
Of people's annual reports;  
Last night I took your last and best  
To read when I retired to rest.

"O Sleep, the certain knot of peace" . . .  
Certain my foot! There's no release  
From ghostly forms around my bed  
And ghostly voices in my head,  
Adjuring me, in terms obscene,  
To scratch a pretty polythene.

Dulux and Dulite, aged crones,  
Laugh heartily at silicones;  
By babbling brook and slender rill  
Polymers drink their Winnofil;  
And in the background, rich and strange,  
New colours of the Alcan range,

The Alcan range, with mountain dew on  
Methyl and glycol, birds that Fluon;  
While up the Drikold slopes, old Sol  
Is climbing to the Topanol,  
Extinguishing the stars that shine, ex-  
actly as in What's my Lynex.

And in the dawn, luxuriant,  
There grows a fine ole olefine plant,  
Beneath whose branches can be seen  
Jack Sprat devouring Terylene;  
Beside him is a youth whom I'd  
Observed committing Antrycide.

Convinced by questionings and screenings  
That she'd developed Faspite leanings;  
"Out on you!" he cries, "Begone!"

I'll live a pro but Diakon!"  
(He burps, and cries with anguished mien  
"I'll have to trichlorethylene.")

Anon the brave Sir Paludrine,  
Shooting a heavy Mysoline,  
Claims furiously that he was more vic-  
torious than Welvic, Darvic, Corvic,  
Or other champions of his Queen:  
"God save!" he shouts, "the British Visqueen

(In Latin it is less perplexin',  
So Vivat Rex, and Vivat Rexine!)."  
His Latin ref'ence spurs me on:  
I sing a song (by Jean Savlon):  
"Common are to either sex  
Limbux, Hydrox, Faradex."

My wife and family insist  
On sending for the alienist.

"The moral of all this," he said,  
"Is: Never, never read in bed."

*As an epilogue to this poem Mr. A. F. C. Speyer, of  
Scotland and Northern Ireland Region, wrote:*

"Knowledge comes but Wisdom lingers"—  
Here's another burnt his fingers.  
A Secretary should have known  
Reports aren't taken lying down,  
And never at the midnight hour,  
When common sense may lose her power  
And humour, fantasy and wit  
Around the staidest pillow flit.  
But thank you for your witty warning:  
I'm off to bed—to sleep till morning!

## YOUR PROFIT-SHARING BONUS

By F. Hill (Pensions Fund Department)

*Next month some 20,000 I.C.I. employees will receive their first block of I.C.I. stock under the Profit Sharing Scheme. Here are the answers to some of the questions which may be asked when the stock certificate arrives.*

FOR the year 1954 it cost the Company over £2½ million to award a profit-sharing bonus of 5% of salary or wages earned. First of all income tax had to be paid by the Company on these bonuses at the rate appropriate to each individual member of the scheme. Then with the balance remaining the Trustees of the Profit Sharing Scheme bought new I.C.I. stock at 51s. 8d. However, few people actually received stock from the Trustees. This is because stock is handed over by the Trustees to individuals only when they have 25 or more units of stock standing to their credit.

This year, however, the position is very different. The profit-sharing bonus for the past year is still 5% of salary or wages earned, but the scheme has now been running for two years. Nearly 20,000 of the 80,000-odd employees who are members of the Profit Sharing Scheme are expected to qualify for their first block of I.C.I. stock by having 25 or more units of stock to their credit. They will be receiving their stock certificates next month (September).

What does a stock certificate look like? Reproduced on page 252 is an I.C.I. Ordinary Stock certificate made out in the name of Mr. John Jones, an imaginary employee of the Company. The actual size of the certificate is 13 in. × 10 in., and the border and lower half are tinted orange colour. You will see that the certificate contains Mr. John Jones' name and address and shows him as the registered holder of £27 Nominal of Ordinary Stock.

"Just what is the value of my certificate?" is the question which most people who receive one will ask themselves. Each £1 unit of I.C.I. Ordinary Stock is, of course, worth much more than £1. At the time of writing (18th June 1956) the market price was 44s. 6d., and Mr. John Jones' stock certificate for £27 therefore represented a cash value of £60 1s. 6d. But the operative words in this sentence are "at the time of writing." Prices of stocks and shares vary from day to day according to the demand or lack of demand on the Stock Exchange, although "Chemicals," as I.C.I. stock is known, seldom vary by more than a few pence from day to day. The average price of I.C.I. Ordinary Stock during the first five months of 1956 was 45s. 1½d. During this period the highest price was 49s. 6d. on 23rd April and the lowest price was 42s. on 20th February. The price is quoted daily in most national newspapers.

"Can I sell my stock?" is another query raised from time to time. The answer to this is quite simple. It is that there are absolutely no strings attached to your holding of stock in I.C.I. Once the stock is registered in your name you can sell it in exactly the same way as any other I.C.I. stockholder. However, employees would be well advised to remember that I.C.I. stock is a first-class permanent investment, and dividends have been paid regularly each year since 1927. Dividends are normally paid twice a year—an interim dividend in November and a final dividend in June. For last year the interim dividend was 4% and the final 6%, making a total for the year of 10%. The advantages of holding on to stock are fairly obvious.

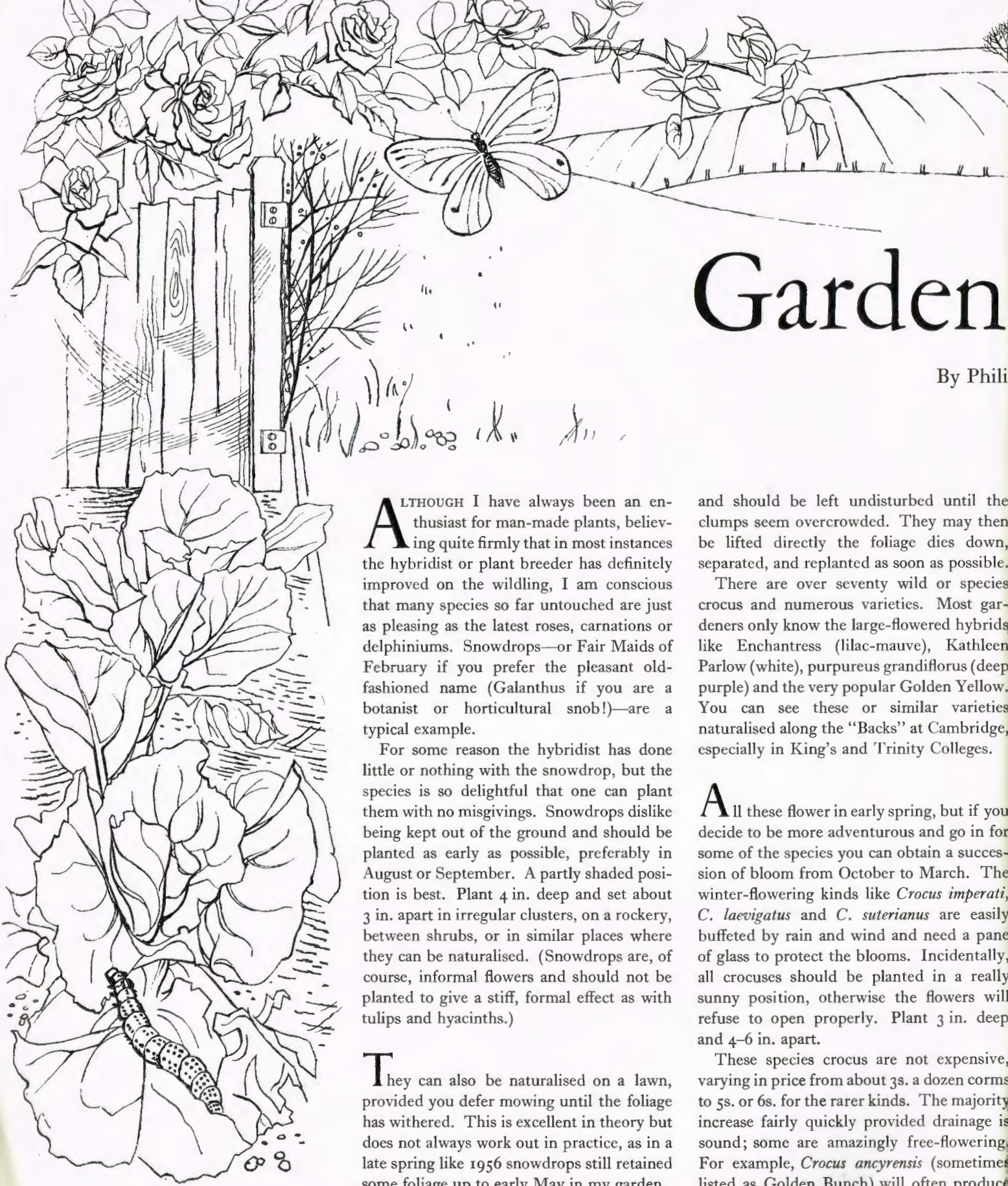
Those who feel they must sell their stock should do so only through a bank or a stockbroker—never through a private individual and certainly never through a casual acquaintance. If you have a bank account, just go and see your bank manager and consult him. If you have no bank account, your Division Labour Department will introduce you to a bank or stockbroker. In either case the charge for selling stock is the same. It amounts to about 3d. in the £ on the market value. In addition, no contract is complete without a stamp. This costs 1s. on sums up to £100. Furthermore, there is always a transfer stamp duty of just under 6d. in the £, usually paid by the buyer.

For example, had Mr. John Jones wished to sell £27 of stock on 18th June 1956, the charge for selling it apart from stamp duty would have been 13s. 6d.

In no case can the Company itself buy stock back from employees, nor can it act for employees who wish to sell stock. However, advice and help will always be gladly given by Staff or Labour Departments.

So much for how to sell your stock, if that is what you want to do. Remember, however, that the Company has introduced the Profit Sharing Scheme in order to enable employees to become stockholders. The Company hopes that employees will, in fact, keep the stock issued to them. Over the years a nice amount of stock can be built up, and its value will increase as the Company prospers. To quote the opinion of no less an authority than Sir John Braithwaite, the chairman of the London Stock Exchange: "I.C.I. Ordinary Stock is one of the finest investments in Britain today."





# Garden Notes

By Philip Harvey

**A**LTHOUGH I have always been an enthusiast for man-made plants, believing quite firmly that in most instances the hybridist or plant breeder has definitely improved on the wildling, I am conscious that many species so far untouched are just as pleasing as the latest roses, carnations or delphiniums. Snowdrops—or Fair Maids of February if you prefer the pleasant old-fashioned name (*Galanthus* if you are a botanist or horticultural snob!)—are a typical example.

For some reason the hybridist has done little or nothing with the snowdrop, but the species is so delightful that one can plant them with no misgivings. Snowdrops dislike being kept out of the ground and should be planted as early as possible, preferably in August or September. A partly shaded position is best. Plant 4 in. deep and set about 3 in. apart in irregular clusters, on a rockery, between shrubs, or in similar places where they can be naturalised. (Snowdrops are, of course, informal flowers and should not be planted to give a stiff, formal effect as with tulips and hyacinths.)

**T**hey can also be naturalised on a lawn, provided you defer mowing until the foliage has withered. This is excellent in theory but does not always work out in practice, as in a late spring like 1956 snowdrops still retained some foliage up to early May in my garden.

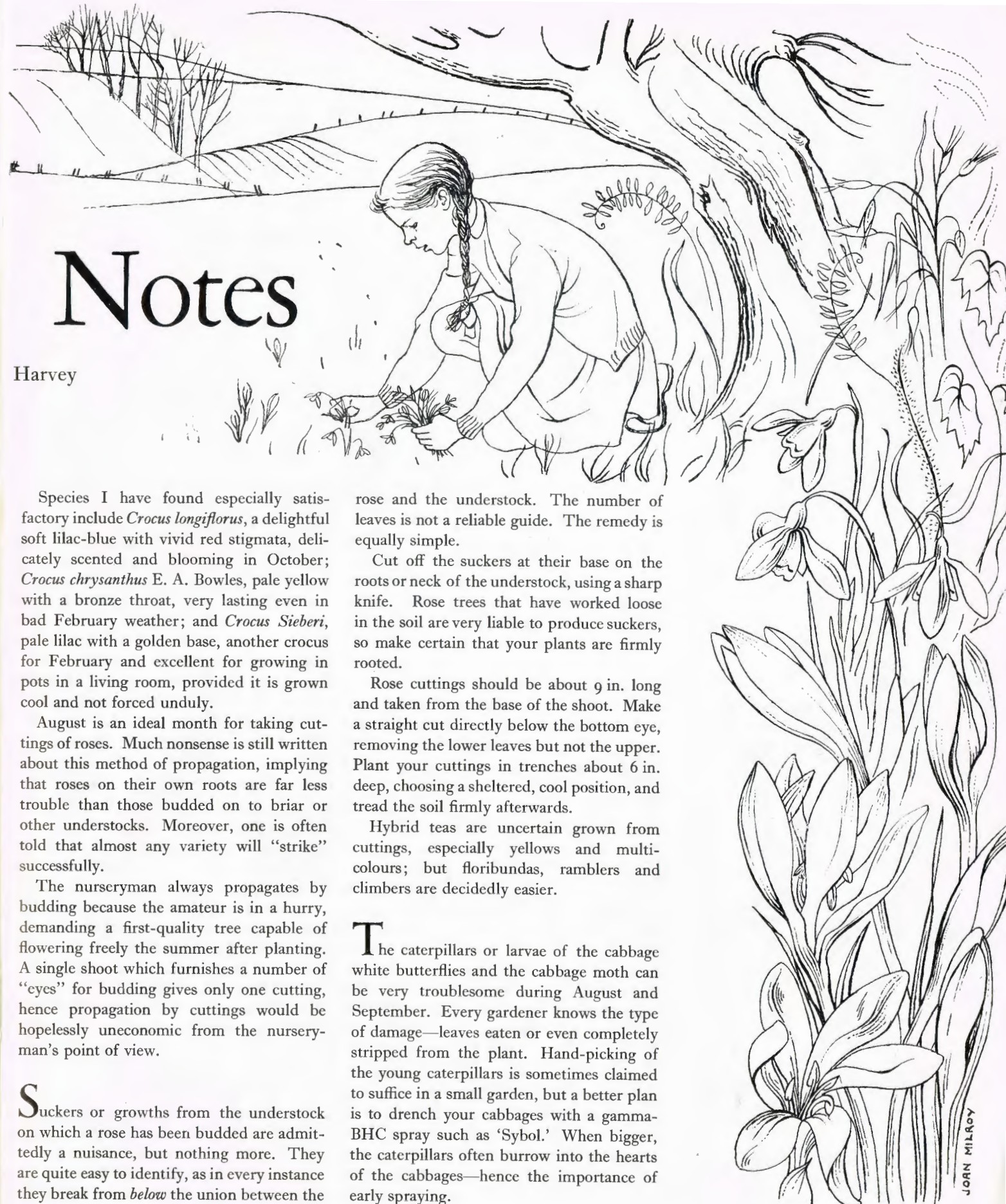
Snowdrops take a little time to settle down

and should be left undisturbed until the clumps seem overcrowded. They may then be lifted directly the foliage dies down, separated, and replanted as soon as possible.

There are over seventy wild or species crocus and numerous varieties. Most gardeners only know the large-flowered hybrids like *Enchantress* (lilac-mauve), *Kathleen Parlow* (white), *purpureus grandiflorus* (deep purple) and the very popular *Golden Yellow*. You can see these or similar varieties naturalised along the "Backs" at Cambridge, especially in King's and Trinity Colleges.

**A**ll these flower in early spring, but if you decide to be more adventurous and go in for some of the species you can obtain a succession of bloom from October to March. The winter-flowering kinds like *Crocus imperati*, *C. laevigatus* and *C. suterianus* are easily buffeted by rain and wind and need a pane of glass to protect the blooms. Incidentally, all crocuses should be planted in a really sunny position, otherwise the flowers will refuse to open properly. Plant 3 in. deep and 4-6 in. apart.

These species crocus are not expensive, varying in price from about 3s. a dozen corms to 5s. or 6s. for the rarer kinds. The majority increase fairly quickly provided drainage is sound; some are amazingly free-flowering. For example, *Crocus ancyrensis* (sometimes listed as *Golden Bunch*) will often produce as many as fifteen flowers to a single corm.



Species I have found especially satisfactory include *Crocus longiflorus*, a delightful soft lilac-blue with vivid red stigmata, delicately scented and blooming in October; *Crocus chrysanthus* E. A. Bowles, pale yellow with a bronze throat, very lasting even in bad February weather; and *Crocus Sieberi*, pale lilac with a golden base, another crocus for February and excellent for growing in pots in a living room, provided it is grown cool and not forced unduly.

August is an ideal month for taking cuttings of roses. Much nonsense is still written about this method of propagation, implying that roses on their own roots are far less trouble than those budded on to briar or other understocks. Moreover, one is often told that almost any variety will "strike" successfully.

The nurseryman always propagates by budding because the amateur is in a hurry, demanding a first-quality tree capable of flowering freely the summer after planting. A single shoot which furnishes a number of "eyes" for budding gives only one cutting, hence propagation by cuttings would be hopelessly uneconomic from the nurseryman's point of view.

**S**uckers or growths from the understock on which a rose has been budded are admittedly a nuisance, but nothing more. They are quite easy to identify, as in every instance they break from *below* the union between the

rose and the understock. The number of leaves is not a reliable guide. The remedy is equally simple.

Cut off the suckers at their base on the roots or neck of the understock, using a sharp knife. Rose trees that have worked loose in the soil are very liable to produce suckers, so make certain that your plants are firmly rooted.

Rose cuttings should be about 9 in. long and taken from the base of the shoot. Make a straight cut directly below the bottom eye, removing the lower leaves but not the upper. Plant your cuttings in trenches about 6 in. deep, choosing a sheltered, cool position, and tread the soil firmly afterwards.

Hybrid teas are uncertain grown from cuttings, especially yellows and multi-colours; but floribundas, ramblers and climbers are decidedly easier.

**T**he caterpillars or larvae of the cabbage white butterflies and the cabbage moth can be very troublesome during August and September. Every gardener knows the type of damage—leaves eaten or even completely stripped from the plant. Hand-picking of the young caterpillars is sometimes claimed to suffice in a small garden, but a better plan is to drench your cabbages with a gamma-BHC spray such as 'Sybol.' When bigger, the caterpillars often burrow into the hearts of the cabbages—hence the importance of early spraying.



# Private Railway

By D. R. Robinson (Dyestuffs Division)

From Towyn, a seaside town in Wales, to Abergynolwyn seven miles inland, there runs the oldest steam-worked narrow-gauge railway in the world still to operate a continuous passenger service. And what is more, it runs at a profit. But then there is something rather special about the staff. The engine driver may be a Harley Street specialist, and perhaps the man repairing the permanent way wears a clerical collar.

**T**HIS year marks the 90th birthday of one of the most remarkable railways in the world. Its claims to fame are many, but one which will appeal to railway enthusiasts and laymen alike is the fact that last year it showed a surplus of £99.

The Talyllyn Railway runs from Towyn, a quaint old market town on the shores of Cardigan Bay, to Abergynolwyn, a little slate-mining village lying at the foot of Cader Idris seven miles up the valley. The oldest steam-worked narrow-gauge railway in the world still to run a continuous passenger service, it was originally built to serve the slate mines at Bryn Eglwys, high above Abergynolwyn. A prolonged strike and two world wars brought hard times to the slate mines, but the owner, Sir Haydn Jones, swore that he would keep them and the railway open as long as the people of the valley wished to work there. Even when the last man left the mines he kept the railway running—at a loss.

His death brought into being a society whose sometimes comical enthusiasm and single-mindedness were immortalised in the British film *The Titfield Thunderbolt*. Faced with the extinction of the unique railway, a band of enthusiasts in Birmingham started the Talyllyn Railway Preservation Society and determined

to work and maintain the line themselves. The Society now has 2000 members (including some in Germany, Japan, Australia and America), branches in Birmingham, London, Manchester and Sheffield, and an unlimited fund of enthusiasm.

Members pay a subscription of £1 a year and give up their holidays and week-ends to work on the railway. When you ride the line the driver of the engine may well be a bishop, the fireman a Post Office engineer; the guard may be one of the top-line drivers who drive the Queen when she travels by train or a Harley Street specialist perhaps. The man up the telegraph pole is one of the country's leading guided missile experts, and the man digging ditches wears a clerical collar.

Each Area Group of the Society organises one week-end working party a month, so that volunteers are present all the year round to keep this unique old railway running smoothly for the 30,000 passengers a year who arrive by coach and train from all over Great Britain.

Why is the line called the Talyllyn? When the quarry owners built the line in 1865 to carry slate down to the sea they were frugally Welsh enough to cut it short at Towyn, alongside the newly built coast



DOWN TRAIN from the Welsh slate-mining village of Abergynolwyn nearing the end of its seven-mile journey to Towyn, on the shores of Cardigan Bay. (BELOW) WEEK-END WORKING PARTY, composed entirely of volunteers, repairing the permanent way.







*Passengers about to board the train at Abergynolwyn terminus*

railway, rather than carry on to Aberdovey and the sea, but they were Irish enough to name the railway after the beautiful Tal-y-Llyn lake, which it never reached!

The railway is a single line with passing loops, to enable trains to cross each other, at each end and at the half-way point. For most of its length the track runs through beautiful countryside, either in the valley or on a rocky shelf high up on the hillside, and like almost all Welsh narrow-gauge lines built for the slate trade the Talyllyn was constructed cheaply. Unlike the others, a passenger service was envisaged from the start, and the foreshortening of the line, the method of construction and the passenger traffic have all had a marked effect on its history. They have enabled it to carry on while many of its apparently more fortunate contemporaries have been closed. All that now remains of these others is an overgrown road bed, a haven for wild animals and birds, grazing for stray sheep or cattle, and twisted trackage rusting beneath the weeds.

Throughout all the change that time has wrought the original locomotives have survived and the pas-

senger stock of the railway, dating back to 1865, still exists. However, despite the fact that Sir Haydn spent an absolute minimum of money on track and rolling stock, the efforts of the volunteers have lifted the status of this "streak of rust" to that of a railway in every sense of the term.

There is now sufficient stock to run four regular trains each day; some of it is original and some of it has been built by members of the Society; the balance has been obtained from other less fortunate railways on their closure. The line is now so good that a speed of 15 miles per hour (the legal maximum) can be maintained, but in former days this was not safe. Records show that in 1944 some of the track was "relaid" by placing the original rail on home-grown oak sleepers cut from living trees on the Jones estate, but these were merely laid on a turf bed and the train rocked alarmingly. The track now is mostly fresh rail of large section, mounted on ex-British Railways' sleepers cut down in length and properly ballasted. The whole forms a living museum which will never die.



TRAIN STANDING at the Abergynolwyn upper terminus. Note the unique brake van containing a booking office with protruding ticket hatch. (BELOW) VETERAN LOCOMOTIVE Talyllyn, built in 1865, laid up awaiting repairs estimated to cost £5000.





# Isle Of Lamu

By Ann White

Isle of Lamu—an island of crumbling Arab palaces tucked away in a bay of the Indian Ocean off the coast of Kenya. The stir of modern civilisation has passed it by. Here Arabs earn their living just as their forbears earned it centuries ago; and along the waterfront the gangs chant as they work waist-deep in the sea.

IF you were to ask a hundred visitors (if indeed so many have been there) on their return from Lamu “What is that magic isle like?” you would get a hundred different answers. How, then, can we visualise this medieval Arab port? An island in a bay of the Indian Ocean just off the northern part of the Kenya coast, reachable from Nairobi only by miles of desert road passable for about three months of the year, or—if you are very rich—by a chartered plane.

Since the abolition of the slave trade in British East Africa in 1807 the prosperity of Lamu has dwindled;

unlike Zanzibar, which had its clove industry to fall back on, Lamu had comparatively little. Yet its some 6000 inhabitants have survived, and visiting it is like a journey into a city of three hundred years ago, so little has it changed.

It is a crumbling city of Arab palaces built so high on either side of the narrow streets that rarely can two people walk abreast. Often you have to flatten yourself against the walls for pack-donkeys, fish-boys and “health carts” to pass by. And although the sun is so fierce and hot, you feel chilled after about twenty

minutes’ wandering in and out of the maze of “streets” which the sun cannot penetrate. All of them seem eventually to lead you to the sea-front, distinguishable through archways by a faint glimmer of the sea.

Whatever time you stroll along the front its scene is always the same. The harbour is full of East Coast dhows of a design found nowhere else in the world. Their crews chant and sing as they wade waist-deep unloading mangrove poles, stacking them by the



*Lamu Arab village and mosque*

thousand in the sea and on every available patch of the front. They are brought from the surrounding islands for export to the Persian Gulf and constitute the island’s main industry.

Further along they are loading dried fish (of memorable aroma) and Lamu matting made from palm fronds, the city’s very own cottage industry (the Magadi Soda Co. seems to be one of its chief customers).

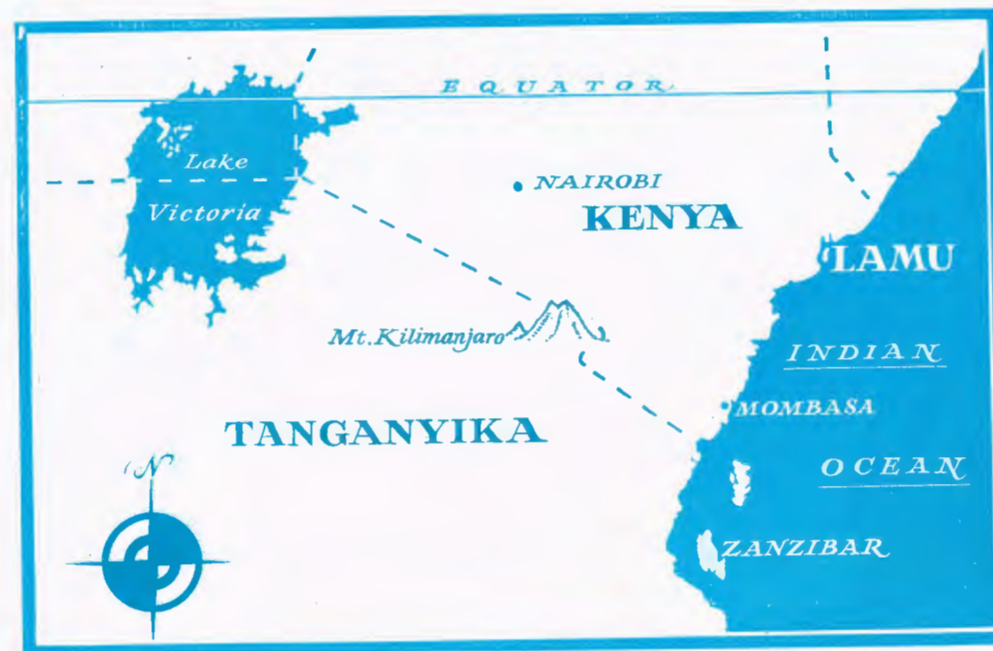
Often you find yourself mixed up with their donkeys carrying panniers of coconuts, wending their way along the front for a mile or two to a copra factory. Continue your walk for a few miles further, and the road becomes deep sand, and you come upon the decayed and ruined village of Shella, with its well-kept mosque of unusual design towering above the debris of thatched roofing and crumbling coral walls. It seems eerie and deserted, but as you wander through courtyards and cracked whitewashed buildings you come upon a few Moslem Swahili families still grappling with their homes.

Rising behind the mosque are sand dunes which

often present a gruesome sight of human bones bleached by the sun. They are the burial-ground of the victims of a fierce battle fought in the eighteenth century when the Arabs from Mombasa and Zanzibar invaded Lamu.

You meet arrogant-looking Arabs dressed in their long white *kanzus* and embroidered hats or turbans. Their manners are courteous and reserved, but their salaams and greetings are full of welcome. Their ancestors were rich. They had palaces to live in and slaves to work for them. Now all that remains to them are their crumbling homes and their faith in Islam. Rarely will you see any women, except on odd occasions when they venture out shrouded in black cotton with only their eyes showing.

Along the front is the one and only hotel, run by that famous character Percy Petley with a handful of African and Arab staff. To know a little of Percy makes it easier to visualise his hotel. He has been around here for more than forty years, and told me that he has really retired and only works in the mornings. His eyesight is failing and he is rather deaf,





but his life has been full of adventures and incidents. In the good old days he traded as far up as Garissa on the Tana River, which used to be one of the toughest spots in the whole of East Africa. He is known from Somaliland to Portuguese East.

### *Funga Baa!*

As we were told on the mainland by an African askari, it is not so much a "hoteli" as a place for drinking beer. It is the only rendezvous for the Europeans, who will come nightly from miles around for a pint at the local, and are loath to leave until Percy appears in his native *kikoi* (a cloth draped round the waist and reaching to the ankles), and with a flick of his fingers bellows the words *Funga baa!* (close the bar!), when they will stream out like rabbits from a warren.

This splendid establishment has several rooms, one of which covers the length and breadth of the top of the building and is known as the bridal suite. It contains two breathtaking beds placed at each end of the room, reached by excruciatingly squeaky floorboards.

Now, if you are ever lucky enough to stay at Petley's I am sure that you will agree that your bath is one of the delights of your visit. The water is poured at intervals into a bucket with a sort of watering-can rose attached, hanging from the ceiling. As it streams over your body you will feel like a million dollars. As the water continues on its way through a hole in the wall to the street below, you will rush with great glee to the shuttered window to see who is the lucky person sharing your ablutions. I just missed sharing somebody's on one occasion.

### *Fish, Fruit and Coconut Milk*

*Mnazi Mmoja* means "The Lone Coconut Palm," which is the name of the place two miles west of Lamu where we spent a holiday camping in a delightful little Arab house, complete with well, household donkey and smiling Arab houseboy. A charmingly picturesque little residence nestling in ten acres of coconut palms almost on the beach.

Life was very peaceful there, waking each morning to brilliant sunshine with a fresh, cool breeze rustling through the palms. We bathed and swam, not worrying too much about mealtimes. Our main diet consisted of fresh fish, fruit and *madhafu* (the creamy "milk" of the young coconut picked before the shell

hardens). We explored the island, talked to the natives, painted, took photographs, and collected many items of interest.

Not far from where we lived was a shipyard where a group of workmen were building a dhow just as their great-grandfathers had done, using the same tools—adze, axe, hammer and bow-drill were all we saw.

Next door to the shipyard were two long bamboo sheds. Here they were processing sesame seeds to obtain simsim oil for cooking. The presses consisted of hollowed-out tree-trunks, set upright in the ground, in each of which there was a sort of pestle, turned by blindfolded camels which walked round and round for many hours of the day, six days a week. The spent seeds were fed to the cattle as a sort of soft cake.

### *Chinese Pottery Puzzle*

Along the shore could often be found the broken sherds of Chinese pottery. We speculated on the origin of this pottery, since there are no Chinese settlements on the island. The explanation was simple. The Chinese, we were told, rarely visited East Africa, since it was too costly to fit out junks, as it was customary for the merchants to travel with their concubines, musicians and dancing-girls "to keep their minds off the terrors of the deep," to a total of some two hundred souls per junk. The Arabs, on the other hand, required fewer comforts and could therefore transport their goods—mostly ivory—much more cheaply. They brought back pottery from China with them.

### *Return to Bustle*

Our holiday ended all too soon. You go with a sad feeling, for you are leaving a peaceful world to return to the hustle and bustle of everyday life on the mainland. The cries of prayer to Allah that fill the air at sunrise and sunset, the music of the dhows as they enter and leave port, the haunting sound of the conch-shell—these will always remain in my memory.

The morning the boat appeared at Mnazi Mmoja to take us to the mainland the tide had gone out, so we paddled knee-deep to the vessel. As I stood looking up at the height of the bows, wondering how on earth I should ever get aboard, a plank was hoisted over the side into the sea. I started to clamber up, almost losing my balance, when a huge black hand covered with engine oil gripped mine like a vice, pulling me over the top and back into the twentieth century.

# I.C.I. NEWS

## I.C.I. DELEGATES AT THE DUKE'S STUDY CONFERENCE

Eleven employees from I.C.I. home and overseas companies were among the three hundred delegates who took part in the Duke of Edinburgh's study conference on the human developments of industrial communities within the Commonwealth and Empire. The conference was held at Oxford last month.

To mark the occasion of this coming together of I.C.I. people from all five continents to attend this important conference under royal leadership, a lunch was held at Imperial Chemical House on 6th July which was attended by Mr. R. A. Banks (I.C.I. Personnel Director) and Mr. E. A. Bingen and Mr. C. R. Prichard (Overseas Directors). This also gave the eleven delegates a chance to meet one another before the opening of the conference.

Six of the conference members came from overseas companies. Mr. Yusuf Khan is an accountant at the head office of I.C.I. (Pakistan) at Karachi. The Canadian delegate was Mr. L. Hemsworth, commercial studies manager in the Development Department of C.I.L. at Montreal. Mr. J. P. Wapenaar is chief superintendent of the Ammonia Synthesis Department at A.E. & C.I.'s Modderfontein factory. Also from Modderfontein was Mr. S. A. G. Anderson. The two I.C.I.A.N.Z. employees were Mr. R. F. Maddison, the chief industrial officer, and Mr. S. J. Gilbert, a process worker at Botany Factory.

The British delegates were Mr. W. Heath, a 33-year-old bag loader at Billingham Factory; Mr. W. E. Garrett, a fitter at Prudhoe Works and chairman of Prudhoe Urban District Council; 29-year-old Mr. O. J. Coffey, a melter in the Witton Titanium Department; Mr. R. Donaldson, a leading-hand nitroglycerine processman at Ardeer factory; and Mr. W. J. P. M. Garnett, a member of Central Labour Department, and vice-chairman of the United Nations Association of Great Britain.



*The I.C.I. conference members with the Personnel Director, Overseas Directors and senior members of Head Office staff, photographed on the roof of Imperial Chemical House*

Sir Alexander Fleck was chairman at one of the Oxford conference sessions as well as being one of the committee chairmen for the conference. Other members of the Company taking part were Mr. Michael Clapham (Metals Division Managing Director), who acted as chairman of one of the study groups, and Mr. R. L. Bewick (Southern Region), who was seconded to the Conference staff for some months immediately before the conference and who was responsible for arranging the study tours in London.

The three hundred conference members were mainly within the 25-45 age group and were drawn from managerial, technical and operative roles in industry. Communities at all stages of industrial development were represented.

The purpose of the conference was a study of the factors which make for happiness and efficiency both inside industrial organisations and in the relations between industry and the community. During the conference period members split up into small study groups and spent nine days touring various industrial centres in Britain.



## HEAD OFFICE

### Mr. J. Robin Allen

Mr. Robin Allen, who joined Brunner, Mond & Co. in 1922 after serving with the Royal Naval Air Service and the Royal Air Force, died suddenly after a short illness on 16th June. He was an engineer and quickly rose to become Works Manager of the Lostock Works of Alkali Division, in which post he remained for 21 years. Recently he was moved to London to take up the newly created job of Schools Liaison Officer, into which he entered with great interest and enthusiasm.

Mr. R. A. Banks (I.C.I. Personnel Director) writes:

To those of us who knew Robin Allen it seems incredible that he will not again come up to us with some delicious story, possibly slightly fantastic, but full of fun and with just sufficient bite to make it all the more enjoyable.

Though his unquenchable sense of fun and of humour, so often turned on himself, was probably the characteristic which most readily impressed those whom he met, this was only the outward trappings. He had a most ingenious mind with a rare store of general knowledge and a desire to find out and to know.

His knowledge and love of history were scholarly and profound, especially in his native county of Cheshire, and he was able and willing to write attractively and well about this and many other subjects.

More fundamentally he was a man with a high sense of duty and purpose founded in the Christian faith of the Church of England, which he served in many capacities for many years. He had that rare quality with younger people of treating them as if they were his contemporaries which had the double virtue of appeal to youth and of keeping him young—far younger than his 59 years. His love and understanding of children were shown by his work for years with the Boy Scouts and the apprentices in the Alkali Division.

Altogether he was a lovable man with many talents, much loved, greatly loving, and a fine example to us all.

## BILLINGHAM DIVISION

### Middlesbrough's Mayor

June 4th 1956 was the day the Queen and the Duke of Edinburgh visited Tees-side and the day which Billingham's Mr. Frederick Manton will remember all his life. For on that day, as the newly elected Mayor of Middlesbrough, he had the privilege of welcoming the royal visitors to Middlesbrough.

Mr. Manton, who is a maintenance fitter in the Oil Works Conversion Section, has been at Billingham since 1941, and his wife is a former Billingham employee. She was on process work at Research Works from the end of 1941 until 1945.

A former chairman of the Middlesbrough Labour Party, Mr. Manton was elected to the town council in 1945. He was made an alderman in May 1949.



Mr. and Mrs. Manton with the Queen and the Duke of Edinburgh at Middlesbrough Town Hall. The Town Clerk of Middlesbrough is on the right.

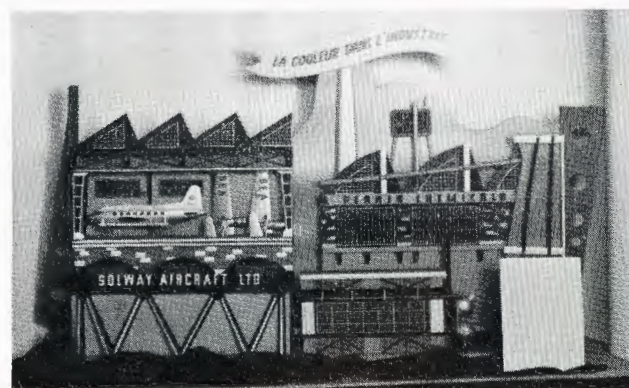
## DYESTUFFS DIVISION

### Twin Towns

Through the Monde Bilingue, a French organisation for promoting good relations between the U.K. and France, the town of Huddersfield has been "twinning" with Besançon, a small agricultural town in the east of France. Contact between the two towns has been made municipally, and it is hoped that close commercial, tourist and cultural ties will result from the venture.

The Besançon Committee requested their opposite number in Huddersfield to send them a display featuring the manufactures and activities of the town, and as I.C.I. is one of the largest industries in the Huddersfield area the Division supplied material for the Besançon exhibition.

The I.C.I. exhibit consisted of four large-scale models



One of the I.C.I. exhibits at the Besançon Fair

illustrating the use of colour in the home, in industry, in commerce and in entertainment, and a display of fabrics illustrating the 'Alcian' range of dyestuffs, and dyestuffs for nylon and 'Terylene' polyester fibre.

### Mr. Mitchell Retires

Chief Colourist of the Division since 1953, Mr. G. O. Mitchell retired at the end of May after 37 years with the Company.

Mr. Mitchell joined British Dyestuffs Corporation Ltd. in 1919 as a colourist at Huddersfield Works soon after his return from the first world war, in which he served in France with the West Yorkshire Regiment in 1915 and later with the Special Brigade, Royal Engineers. After



Mr. G. O. Mitchell

three years at Huddersfield Works he was transferred to Dychouse Department at Hexagon House. He was appointed Head of Textile Dyeing Section in 1934 and promoted to the position of Assistant Chief Colourist in 1938.

During Mr. Mitchell's long career with the Company he made a number of visits abroad as a technical representative. Many years of personal contact with people in every branch of the industry gave him a pro-

found knowledge of the special requirements of the dyestuff consumer, and his advice was widely sought and freely given, both inside and outside the Division.

## GENERAL CHEMICALS DIVISION

### Learned of M.B.E. Abroad

Mr. Alfred Ayres of Cassel Works General Services Section, who is a warrant officer in 608 (North Riding) Squadron of the Royal Auxiliary Air Force, was awarded the M.B.E. in the Queen's Birthday Honours List.



Mr. A. Ayres

He learned of his award while out in Gibraltar, where his squadron was at the annual two-week camp. A leading-hand painter at Cassel Works, Mr. Ayres has been in the Royal Auxiliary Air Force for 20 years, and except for war-time postings to other units all his service has been with 608 Squadron. In October

last year he was promoted to the rank of warrant officer, the first member of the Auxiliary to reach this rank.

Alfred Ayres has been employed at Cassel Works since July 1933 and served on the Works Council from 1949 to 1953.

## METALS DIVISION

### M.B.E. for Service with the Territorials

Mr. Jim Faizey of Transport Maintenance Department, Witton, has been awarded the M.B.E. for loyal and

devoted service to the T.A. for twenty years. He volunteered for service with the Territorials in 1936, when I.C.I. and a number of other large companies formed their own units. He was almost immediately transferred to the Royal Engineers and served with them at home and overseas during the war. He returned to his old unit in 1947 because, he said, "You find a comradeship in the Forces which you just do not find anywhere else." Jim is one of the few in the regiment who received the Coronation medal. His three sons also serve in the same unit.



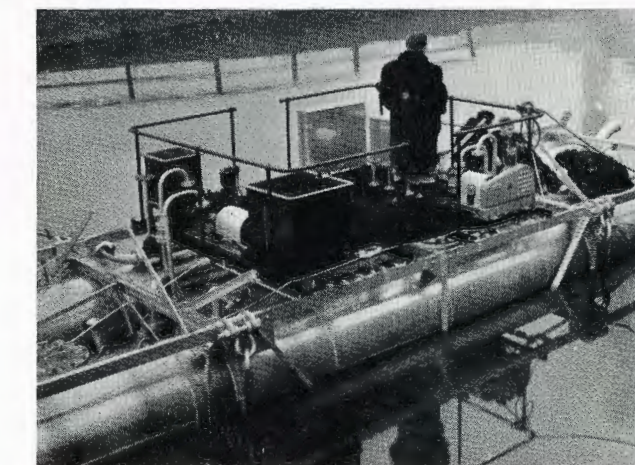
Mr. J. Faizey

## Floating Waterworks

Now in service on the river between Basra and Baghdad, Iraq, are two water purification plants built at the Wolverhampton factory of Marston Excelsior Ltd. They are part of a scheme to supply pure drinking water to remote areas of the country where villagers have in the past had to rely on the bacteria-laden waters of rivers and canals.

Each unit is in effect a complete floating waterworks. It filters and purifies the water of the river in which it floats and delivers it to the main at a rate of 1200-2400 gallons an hour—sufficient for a village of up to 1500 people. The plant is moored to the river bank in such a way as to allow for a 40 ft. rise or fall in water level.

This last point emphasises why the unit must float. Rivers in Iraq are most temperamental; the banks, liable to be flooded periodically, are too silty to withstand heavy loading. So when Mr. George Smethurst, a Baghdad water engineer, evolved a cheap and effective scheme of water purification, it seemed logical to adapt it to a



Technicians check over the floating water purification plant during trials on the river Weaver in Cheshire



"waterworks" which would rise and fall with the river level and require no foundations.

This was where Marston's came into the picture. They built a trial floating plant in aluminium alloy and sent it out to Iraq just over a year ago. The success of the project can be gauged by the fact that two production models of an improved type are already in service.

## NOBEL DIVISION

### "Dreadnought" steals the Show

Year by year the number of Thames barges which work on the river grows smaller. Of the six barges which took part in the Thames and Medway sailing matches this year only three were working vessels, two of them being the I.C.I. barges *Dreadnought* and *Edith and Hilda*.

The races proved a great triumph for 49-year-old *Dreadnought*. At 70 tons the biggest barge in the race, she came in first in the restricted staysail class in both races. Over the 30-mile Medway course she was the first barge home and 65 minutes ahead of the other barges in her class, the *Edith and Hilda* and the Ipswich barge *Westmoreland*. For this Skipper Jack Spillett was awarded the British Petroleum Kent Refinery's prize for the best feat of seamanship in the race. The other members of the crew were his regular mate, Peter Redsell, Alf Hadlow, master of the *Gipping*, and his mate, Ron Goodwin.

*Edith and Hilda*, the other I.C.I. barge, was a newcomer to the races. Built at Sittingbourne in 1892, she was the oldest barge in the races. Her crew on this occasion was Arthur Chapman (skipper) and his brother John, Bill Dartnell (master of *Ardeer*) and Jack Goodwin (master of *Asphodel*).

Nobel Division presented the cup for the championship class for this year's Medway race. This was won by *Veronica*, a 56-ton veteran refitted earlier this year after laying derelict at Greenhithe for six years. (See pictures on page 253.)

## PHARMACEUTICALS DIVISION

### Delegate Board Appointments

New appointments to the Delegate Board of the Division were announced on 2nd July. Mr. E. D. Carey becomes Managing Director and Dr. J. Y. Bogue, Mr. W. H. Grice and Dr. L. B. Wevill are appointed to the Board. Mr. Carey has been with I.C.(Pharmaceuticals) as Commercial Director since 1946. He was formerly Deputy Regional Manager, Northern Region. Mr. Grice joined Brunner, Mond & Co. (India) Ltd. in January 1927. After holding various appointments he became a director of I.C.I. India Ltd. in 1939 and a managing director in 1948. Retiring from India in March 1950, he came to Wilmslow as deputy to the sales manager, subsequently becoming General Sales Manager. Dr. J. Y. Bogue joined the Company in October 1943 as a physiologist in the Biological Department at Hexagon House, Blackley, and was subsequently appointed Biological Research Manager. He

is a visiting member of the Board of Central Agricultural Control. Dr. L. B. Wevill joined the Company in April 1947 as Medical Services Adviser and subsequently became head of the Medical Department, later known as Medical Services Department.

### Commercial Services Manager Retires

The retirement of Mr. T. Parker on 30th June ended 48 years' service with I.C.I., of which nearly 28 years were spent with I.C.I. (India) Ltd.

Mr. Parker, who until his retirement was Commercial Services Manager of the Division, joined Brunner, Mond & Co. in July 1908. In August 1914 he enlisted in the Manchester Regiment, being drafted to India, where, after the war, he remained with Brunner, Mond & Co. in their Karachi office. Subsequently he was transferred to Bombay, becoming Bombay Manager of I.C.I. (India) Ltd. in 1928 and a director of that company in 1929. In 1942 Mr. Parker was appointed Contoller, Heavy Chemicals, to the Government of India.

Returning to this country on retirement from India in 1946, Mr. Parker joined Pharmaceuticals Division in 1947, becoming deputy to the sales manager. On 1st April 1950 he was appointed Manager of the Package and Supply Department and in August 1954 became the Division's first Commercial Services Manager.

A notable cricketer, Mr. Parker played regularly in India and was a member of the European side which played in the quadrangular tournament during the visit of the Prince of Wales in 1921—a team which included C. B. Fry, G. H. Hirst, Wilfred Rhodes, A. C. Hosie, J. H. Parsons and B. Higgins. A member of the Royal Calcutta Golf Club and of other noted golf clubs in India, Mr. Parker was in the I.C.I. (India) side which won the Merchants' Cup for the first time in 1938.

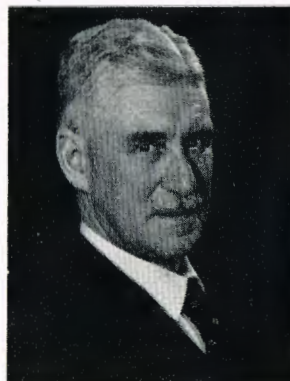
## WILTON WORKS

### New Extensions planned for Wilton

The Company has decided to erect a third oil-cracking plant and an additional plant for the manufacture of polythene on the Wilton site. These extensions, together with auxiliary services, will, it is estimated, cost the Company over £16 million.

Wilton's first oil cracker came into operation in 1951, and the second plant, now nearing completion, will come on stream towards the end of this year. The proposed new oil cracker, which will be larger than the existing plants, is scheduled to be ready early in 1959.

The main product of the new plant—ethylene—will be



Mr. T. Parker

used to manufacture 'Alkathene,' I.C.I.'s brand of polythene. Wilton's third polythene plant came into production last year. Now the additional plant to be built under this new Wilton project will raise the Company's yearly output of 'Alkathene' in Britain to over 90,000 tons.

## SCOTTISH AGRICULTURAL INDUSTRIES

### Retirement of Sir William Gavin

Sir William Gavin, C.B.E., resigned the chairmanship of Scottish Agricultural Industries Ltd. in June on reaching the age of 70. A director for twenty-five years and chairman since 1951, he has seen the turnover of the company increase from some £3 million to £23 million.

When he joined I.C.I. in 1928 William Gavin already had behind him a distinguished record of service with the Ministry of Agriculture during the 1914-18 war. During the years immediately before the second world war as a member of Sales Control Department, as agricultural correspondent to a number of national newspapers and journals and as a farmer in his own right, he became one of the outstanding figures in British agriculture. With the second world war he returned to the Ministry of Agriculture as chief agricultural adviser to the Minister. He was knighted in 1942.

Released from the Ministry in 1947, Sir William returned to Central Agricultural Control and was appointed deputy chairman. He became chairman of S.A.I. in 1951.

He is succeeded as chairman by Mr. W. D. Scott (I.C.I. Main Board Director responsible for Billingham and Wilton). Mr. Scott has been a director of S.A.I. since 1952.

## I.C.I. BELGIUM

### First Long Service Award

The first long service award in the history of I.C.I. Belgium was recently made to M. Sylvain Moerman by Mr. C. R. Prichard (I.C.I. Overseas Director).



M. Moerman receives his long service award from Mr. Prichard

M. Moerman joined M. Ketel's agency, which handled the products of Dyestuffs Division in 1936. When the Germans invaded Belgium in 1940 he was mobilised with the Belgian Army and was captured and taken to Germany. He was later released and sent back to Belgium, where he ultimately became an inspector for the Belgian Ministry of Food. He rejoined M. Ketels immediately after the Liberation in 1944 and so became an original member of I.C.I. Belgium on its establishment in October 1946.

## OUR NEXT ISSUE

Our lead for the September issue is the story of Nobel Division's Bickford Smith factory at Tuckingmill, written by the Editor. This factory, a tiny cluster of cream-washed buildings, is world renowned for its manufacture of Bickford Smith safety fuse. William Bickford patented his fuse in 1831, and today, a century and a quarter later, his invention is still holding its own, and the principles of fuse manufacture have changed little since the early days of the factory when the main output went to the Cornish mines.

Next month's colour feature is on copper mining. The accompanying article has been written by Mr.

L. I. Crawford, who was president of I.C.I. (Chile) and vice-president of the South American Explosives Company until he retired in 1954. He writes from personal experience of Chuquicamata in Chile, the largest known single copper deposit in the world. I.C.I. are part owners of the explosives plant supplying the mines.

Then we have an amusing tale from Dr. James Taylor (Director responsible for Metals and Nobel Divisions) who describes his initiation into the mysteries of motor rallying. He entitles his article "The Reluctant Rallyist."

## BINDING OF 1955 MAGAZINES

The Kynoch Press have again kindly agreed to bind *Magazines* for those who would like this done. The cost, including an index, will be 11s. 6d. per volume. Inserts, if required to be bound, will be in a separate volume at a cost of 11s. 6d.

If you would like your *Magazines* and/or inserts bound, will you please tell your *Magazine* correspondent now. All *Magazines* and inserts must be provided by the person placing the order.

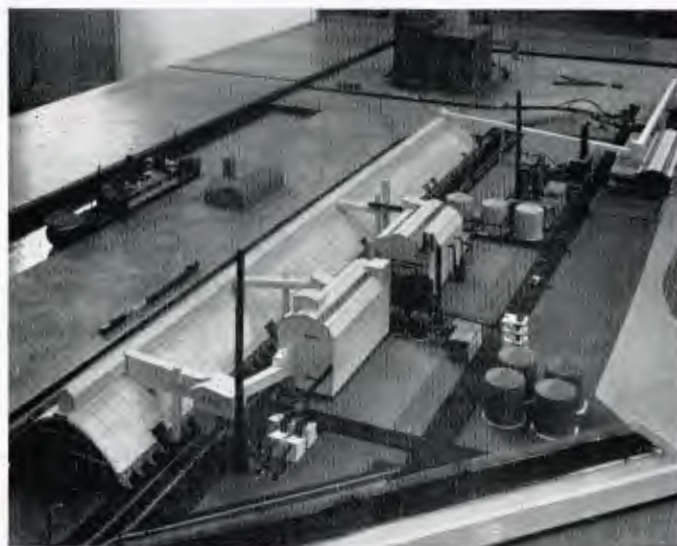


# NEWS IN PICTURES



New fertilizer works being built by Scottish Agricultural Industries Ltd. is on land reclaimed from the Firth of Forth. Site is adjacent to deep-water berth and marshalling yard.

Factory will produce granular concentrated fertilizers on large scale, and will cost over £3 million. Above: Framework of the 907ft. long raw material store. Below, left: Scale model of factory



Pilot cinema advertising scheme for 'Dulux' and 'Du-lite' was introduced last month. The films are being shown in selected towns in various parts of the country. Above: A shot from the cartoon film "Your World of Colour"



Scientists from forty countries came to the second International Plant Protection conference at Fernhurst Research Station. Above: Mr. E. M. Fraser (Chairman of Plant Protection Ltd.) welcomes delegates at inaugural luncheon at Dorchester Hotel. Right: A party of delegates photographed touring the Fernhurst Estate. They are Dr. J. Kimura (Japan), Dr. G. Watts Padwick (C.A.C.), Dr. P. S. Hudson (Cambridge), Prof. K. T. Suchorukov (U.S.S.R.) Sir John Russell and Mr. R. E. Hunter (P.P.L.)



The conference in session. An extensive system of closed-circuit television was used to screen films and slides illustrating delegates' lectures. Sixty latest type Murphy TV sets relayed the pictures in conference hall

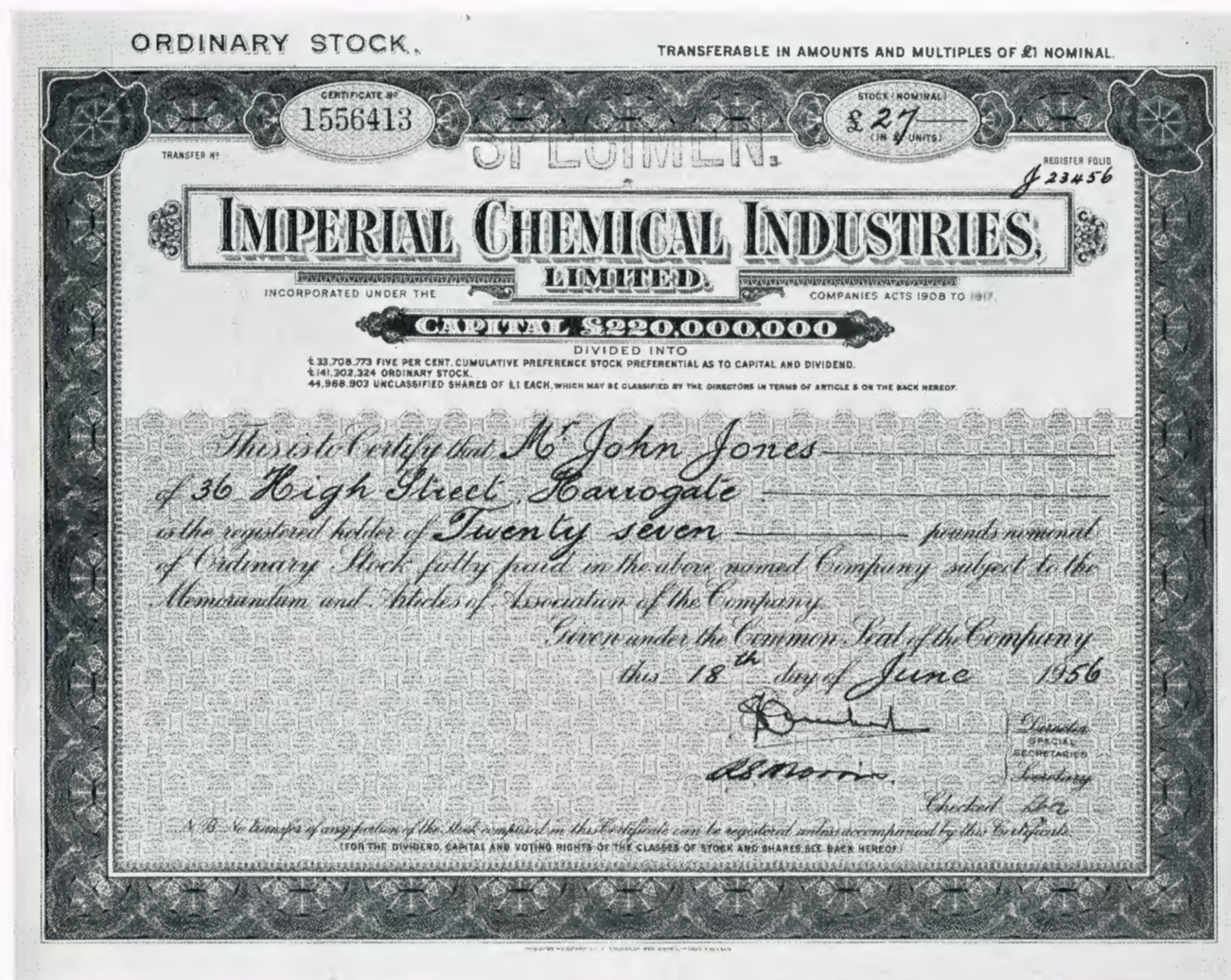


Taking part in the Torbay-Lisbon sail-training race last month was the 697-ton schooner "Creole" owned by Mr. Stavros Niarchos. "Creole" has the largest set of sails in the world (24,000 sq. ft.), with a spinnaker of 'Terylene'



Demonstration of agricultural machinery at Fernhurst included the Agricola electroduster. A positive electric charge is put on dust particles distributed which are attracted to foliage by negative charge on leaf surfaces. Dust deposit is increased from four times to ten times that obtained with uncharged dust





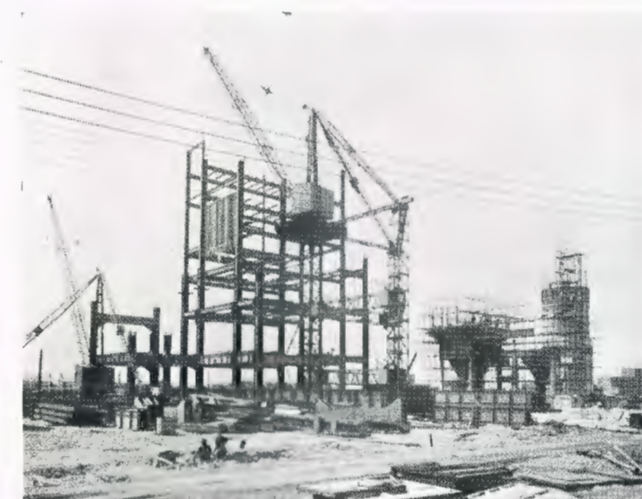
Next month nearly 20,000 employees are expected to receive their first block of stock under the I.C.I. Profit Sharing Scheme. Reproduced above is an I.C.I. Ordinary Stock Certificate. The certificate is 13 in. x 10 in. (See Information Note, page 235)



A young sparrow, found trapped in 'Thionol' Dept. at Blackley Works, made its home in the 'Monastral' shed, where the blue pigment is made. Above: "Bluey" is with Mr. Richard McCrosson of Engineering Dept.



Supplies of Drikold from Billingham go almost daily to Northern Ireland. One of the largest consumers is the Ulster meat trade. The photograph above shows one of the special containers used by Anglo-Continental Container Services for transporting chilled beef carcasses



A new power station costing several million pounds is under construction at Thornton Cleveleys, near Blackpool. General Chemicals Division is responsible for construction. When finished it will also serve four other I.C.I. Divisions with works in the area—Alkali, Dyestuffs, Fibres and Plastics



Comedian Ted Ray raises a laugh from waitresses Doreen Bell and Jean Smith at the Alkali Division Foremen's Dinner



Top-of-the-bill attraction at the Alkali Division Gala Day at Winnington was a daring trapeze act from a helicopter by Mlle. Andrée Jan, seen in the above photograph just taking off



Thames and Medway barge sailing matches proved a triumph for Nobel Division's "Dreadnought," seen here off the Isle of Grain. Left: the "Dreadnought's" crew. (See page 248)



# The Doll's House

By Sidney Rogerson

STRANGE, I thought at first, how the discovery during spring cleaning of a forgotten doll's house should have evoked such poignant memories of the last war.

Our daughter Jane was six years old when in 1943 Great Britain was nearing the apogee of austerity. She began to yearn for some of the toys and playthings which were then denied her. In the autumn of that year she dismayed us by remembering that there were once such things as dolls' houses, by which the young woman that is in every girl child can escape into her own world in anticipation of the role nature has destined her to play in life.

She begged us to persuade Father Christmas to bring her one. But nowhere could a doll's house be bought. Then the near miracle happened. Some village worthy told us of a couple of old-age pensioners, husband and wife, who had been accustomed before the war to add to their slender income by making models, toys and knick-knacks. Perhaps if we could track them down they would be able to help. Track them down we did and contracted with them to make us a doll's house against December 1943, and that at a reasonable price.

In due course we collected the piece, which, though by pre-war standards of finish was a rough-and-ready affair, had all the essentials of the real thing. It was of two storeys, with a drawing room, dining room, bathroom, kitchen and two bedrooms. All the furniture was cleverly contrived out of matchboxes covered with odds and ends of material.

Its arrival was naturally kept a close secret. Exulting in our success, we indulged the Father Christmas spirit to the extent of faking a card from the fairy godfather of small children, addressed to Jane and

suitably blackened with soot from the chimney. This was put in her stocking for her to find when she wakened. The doll's house being far too big, we placed it in the most imposing position on the floor of our bedroom, and on Christmas morning we got out of bed early, lit the oil lamps with which the house was lighted, and went to call the young lady. She stumbled out of her blacked-out bedroom into the light, and with her fingers rubbing the sleep from her eyes saw the house on the floor before her. She gave one half-credulous look at it, then quickly averted her eyes and went back to her room. She just dared not look at it for fear that it might not be there next time.

She could not believe the thing had happened, and indeed it took her a full day and more before she could bring herself to touch it, much less to inspect it. Then the practical side of childhood asserted itself. There were continual alterations to be made to the placing of the furniture and improvements to the amenities of the house. Again we were lucky enough to find such accessories as a grandfather clock, a bath, a lavatory, and even a battery lighting set—some of these came from friends in the U.S.A. and others from adoptive "uncles" in distant parts of England. As month followed month the house became a real all mod. con. dwelling, which our own home was far from being. By the time the uncertainty of life had been aggravated by the flying bomb and the V2 the house was a going concern and a full-time occupation for a small girl of eight.

Then one day her mother found the house with all its windows open, its furniture tumbled higgledy-piggledy out of doors and the curtains blown haphazardly outside the windows. She asked her



*"Oh, it was hit by a V2!"*

daughter what had happened. Why this sudden change from the carefully tended dwelling?

"Oh, it was hit by a V2!" was the calm if surprising reply.

"Then what has happened to the people who live in it?"

"They were all killed—and I've buried them in the manure heap." And with that devastating judgment of a wartime child ended the active existence of the doll's house. Jane's interest seemed to cease from that moment. In her mind apparently it was written

off as a casualty of war, and thus eventually found its way into the attic, where we discovered it.

Lastly, there was the sequel which only became known to us years later. One day when we were talking about her doll's house Jane volunteered the information "And, you know, that was when I first realised there was no such person as Father Christmas." When asked why, she replied "Well, first I recognised your handwriting on the card, and secondly how could anyone have brought that doll's house down any of our chimneys!"





*Great Langdale*

*Photo by Miss R. Higginbottom (Leathercloth Division)*